



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,686	06/19/2006	Kevin Flower	063511-9089-00	4476

7590 09/18/2008
David B Smith
Michael Best & Friedrich
100 East Wisconsin Avenue
Suite 3300
Milwaukee, WI 53202-4108

EXAMINER

SZNAIDMAN, MARCOS L

ART UNIT	PAPER NUMBER
----------	--------------

1611

MAIL DATE	DELIVERY MODE
-----------	---------------

09/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,686	Applicant(s) FLOWER ET AL.	
	Examiner MARCOS SZNAIDMAN	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 13, 14 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 14 and 20-23 is/are rejected.
- 7) ☒ Claim(s) 13 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4 pages / 04/28/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to applicant's reply filed on May 21, 2008.

Election/Restrictions

Applicant's election without traverse of Group II (claims 1, 13-14, and 20-24) and compound B (page 21 of the specification) as the elected species, in the reply filed on May 21, 2008 is acknowledged.

Since the elected species is free of prior art, examination was expanded to the following species: bis[M-[(diethylphosphonio)bis(methylene)]di-Gold (CAS# 59120-29-5) and [M-(1,3-phenylenedi-2,1-ethynediyl)]bis(triphenylphosphine)di-Gold (CAS# 515159-28-1).

Status of Claims

Claims 1, 13-14 and 20-24 are currently pending and are the subject of this office action.

Claims 1, 13-14 and 20-24 are presently under examination.

Priority

The present application is a 371 of PCT/GB04/05440 filed on 12/20/2004, and claims priority to foreign application UNITED KINGDOM 0329416.2 filed on 12/19/2003.

Claim Objections

Claims 14 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant is reminded that only the species: compound B (page 21 of the instant specification), bis[M-[(diethylphosphonio)bis(methylene)]di-Gold (CAS# 59120-29-5) and [M-(1,3-phenylenedi-2,1-ethynediyl)]bis(triphenylphosphine)di-Gold (CAS# 515159-28-1) are under examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Schmidbaur et. al. (Zeitschrift fuer naturforschung teil B anorganische chemie Organische Chemie (1978) 33:1325-1329, cited by applicant).

Claim 1, recites a pharmaceutical composition for the treatment of cancer, comprising an effective amount of a compound having two gold(I) atoms each covalently bonded to a carbon atom in a covalent link connecting two gold (I) atoms and a pharmaceutically acceptable excipient.

Art Unit: 1611

For claim 1, Schmidbaur et. al. teach a pharmaceutical composition comprising a compound of formula 7 (bis[M-[(diethylphosphonio)bis(methylene)]di-Gold (CAS# 59120-29-5) see abstract and also see page 1326, second column, compound 7) which is encompassed by the genus of claim 1.

The statement in claim 1: "for the treatment of cancer" is considered an intended use and does not add any new limitation to the claim. *Catalina Mktg. Int'l, Inc. V. Coolsavings.com, Inc.*, 289 F.3d 801, 808, 62 USPQ2d 1781, 1785 (fed. Cir. 2002). "The recitation of a new intended use for an old product does not make a claim to that old product patentable." *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 13, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vicente et. al. (Journal of Organometallic Chemistry (2002) 663:40-45, in view of Schmidbaur et. al. (Zeitschrift fuer naturforschung teil B anorganische chemie Organische Chemie (1978) 33:1325-1329, cited by applicant).

Claim 1, recites a pharmaceutical composition for the treatment of cancer, comprising an effective amount of a compound having two gold (I) atoms each covalently bonded to a carbon atom in a covalent link connecting two gold (I) atoms and a pharmaceutically acceptable excipient.

Claim 13 further limits claim 1, wherein the compound has the formula shown in claim 13.

Claim 20 further limits claim 13, wherein L and L' are independently selected from the group consisting of: PR₃, P(OR)₃, CNR, etc.

Art Unit: 1611

Claim 21, further limits claim 20, wherein R is a substituted or unsubstituted alkyl, alkene, etc.

Claim 22 further limits claim 20, wherein R is selected from the group consisting of methyl, ethyl, etc.

Claim 23 further limits claim 20, wherein the ligand is PPh₃.

For claims 1, 13, and 20-23, Vicente et. al. teach the compound: [M-(1,3-pheylenedi-2,1-ethynediyl)]bis(triphenylphosphine)di-Gold (CAS# 515159-28-1) (see compound 13 on Scheme 2, page42), which is encompassed by all the above claims.

Vicente et. al. do not teach a pharmaceutical composition of [M-(1,3-pheylenedi-2,1-ethynediyl)]bis(triphenylphosphine)di-Gold (CAS# 515159-28-1), however at the time of the invention it would have been prima facie obvious to the skilled in the art to make a pharmaceutical composition of a known compound, since Schmidbaur et. al. teach that compounds containing gold(I) atoms can be useful for the treatment of arthritis (see abstract) thus resulting in the practice of claims 1, 13, and 20-23 with a reasonable expectation of success.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCOS SZNAIDMAN whose telephone number is (571)270-3498. The examiner can normally be reached on Monday through Thursday 8 AM to 6 PM.

Art Unit: 1611

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila G. Landau can be reached on 571 272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARCOS SZNAIDMAN/
Examiner, Art Unit 1611
September 5, 2008

/MP WOODWARD/
Supervisory Patent Examiner, Art Unit 1615